

ABSTRAK

Agustia, Mela. 2023. Pengembangan Modul Ajar Model PBL-Networked Berbasis Etnosains Materi Zat dan Perubahannya untuk Meningkatkan Pemahaman Konsep dan Minat *Entrepreneurship* Siswa. Tesis. Program Magister Pendidikan IPA Universitas Jambi. Pembimbing I. Dr. Dra. M. Dwi Wiwik Ernawati M.Kes. II. Dr. Pinta Murni, M.Si.

Pembelajaran abad 21 menuntut peserta didik memiliki *life skill* (kecakapan hidup) yang relevan dengan perkembangan ilmu pengetahuan sehingga terbentuk peserta didik yang aktif dan mandiri. Oleh karena itu penting dilakukan penanaman minat *entrepreneurship* sejak dini. Melalui model pembelajaran PBL-Networked berbasis etnosains guru dapat memfasilitasi siswa mengembangkan pengetahuan melalui jejaring pakar yang ada di daerah sekitar sehingga pembelajaran lebih bermakna. Belum adanya modul ajar kurikulum merdeka yang terintegrasi kearifan lokal menjadi kesulitan guru dalam menyiapkan dan menyampaikan pembelajaran di kelas. Berdasarkan hasil observasi terhadap guru dan siswa di SMPN 4 Sungai Penuh pengembangan modul ajar berbasis model PBL-Networked berbasis etnosains sangat perlu dilakukan. Penelitian ini bertujuan untuk menghasilkan modul ajar model PBL-Networked berbasis etnosains yang layak menurut ahli desain pembelajaran dan ahli materi serta praktis menurut praktisi dan mengetahui efektivitas modul ajar model PBL-Networked berbasis etnosains terhadap pemahaman konsep dan minat *entrepreneurship* siswa SMP kelas VII. Penelitian ini merupakan penelitian pengembangan yang mengadaptasi prosedur pengembangan Dick & Carey yang terdiri dari 10 tahapan. Teknik analisis data menggunakan statistik deskriptif kuantitatif, *N-gain* dan uji MANOVA. Hasil penelitian pengembangan ini berupa modul ajar model PBL-Networked berbasis etnosains yang layak digunakan. Berdasarkan penilaian ahli dengan kriteria sangat baik untuk kesesuaian aspek yang dinilai (materi dan desain pembelajaran). Kepraktisan penggunaan perangkat dari guru dinilai sangat praktis, dan keterbacaan dinilai sangat baik oleh siswa. Modul ajar juga efektif terhadap peningkatan pemahaman konsep dan minat *entrepreneurship* siswa secara signifikan, berdasarkan hasil uji *One way* MANOVA menunjukkan nilai signifikansi 0,000 yang kurang dari tingkat signifikansi $\alpha = 0,005$. Sehingga terdapat perbedaan rata-rata peningkatan pemahaman konsep dan minat *entrepreneurship* siswa yang signifikan antara siswa yang belajar menggunakan modul ajar model PBL-Networked berbasis etnosains dan siswa yang menggunakan modul ajar yang sudah tersedia di platform merdeka belajar. Dapat disimpulkan bahwa modul ajar model PBL-Networked berbasis etnosains materi zat dan perubahannya layak dan efektif digunakan untuk meningkatkan pemahaman konsep dan minat *entrepreneurship* siswa.

Kata Kunci: Etnosains, *entrepreneurship*, PBL-Networked, modul ajar, pemahaman konsep.

ABSTRACT

Agustia, Mela. 2023. Development of Ethnoscience-Based PBL-Networked Modules Material Substances and Changes to Increase Students' Concept Understanding and Interest in Entrepreneurship. Thesis. Jambi University Science Education Masters Program. Supervisor I. Dr. Dra. M. Dwi Wiwik Ernawati M. Kes. II. Dr. Pinta Murni, M.Si.

21st century learning requires students to have life skills that are relevant to the development of science so that active and independent students are formed. Therefore it is important to instill entrepreneurial interest from an early age. Through the ethnoscience-based PBL-Networked learning model, teachers can facilitate students to develop knowledge through a network of experts in the surrounding area so that learning is more meaningful. The absence of independent curriculum teaching modules integrated with local wisdom has made it difficult for teachers to prepare and deliver lessons in class. Based on the results of observations of teachers and students at SMPN 4 Sungai Penuh, the development of teaching modules based on the ethnoscience-based PBL-Networked model really needs to be done. PenThis research aims to produce teaching modules based on ethnoscience based on PBL-Networked models that are appropriate according to learning design experts and material experts as well as practical according to practitioners and to find out the effectiveness of teaching modules based on ethnoscience based PBL-Networked models on conceptual understanding and interest in entrepreneurship in class VII junior high school students. This research is a development research that adapts the Dick & Carey development procedure which consists of 10 stages. Data analysis techniques used quantitative descriptive statistics, N-gain and the MANOVA test. The results of this development research are in the form of an ethnoscience-based PBL-Networked teaching module that is feasible to use. Based on expert judgment with very good criteria for all aspects assessed (learning materials and design). The practicality of using the device from the teacher is considered very practical, and the readability is considered very good by the students. Teaching modules are also effective in significantly increasing students' understanding of concepts and interest in entrepreneurship, based on the results of the One way MANOVA test showing a significance value of 0.000 which is less than the significance level of $\alpha = 0.005$. So that there is a significant difference in the average increase in students' understanding of concepts and interest in entrepreneurship between students who study using the ethnoscience-based PBL-Networked model teaching module and students who use teaching modules that are already available on the independent learning platform. It can be concluded that the teaching module of the PBL-Networked model based on ethnoscience of substance and its changes is feasible and effective to be used to increase students' understanding of concepts and interest in entrepreneurship.

Keywords: *Ethnoscience, entrepreneurship, PBL-Networked, teaching modules, understanding concepts.*